

**AMENDMENTS TO THE SPECIFICATION**

Please replace paragraph [0019] at page 5, beginning at line 10, with the following paragraph:

[0019] It has also been proposed (in a publication by Jongen and Morelle, International Symposium "Proceedings of the third workshop on targetry and target chemistry", <http://www.triumf.ca/wttc/proceedings.html>, Vancouver, June 1989) to use a device in the form of circuit comprising an irradiation cell with a cavity containing a target material and an external heat exchanger in which the said H<sub>2</sub><sup>18</sup>O target material is recirculated so as to be cooled. This device, compared with that of the abovementioned prior art, therefore has the advantage of using a target material that can be termed "dynamic" since it is recirculated. Nevertheless, that device and method did not use pressurizing means so that the control of the pressure is a real problem in such a device. Moreover, said device and method were not explained in detail and are in practice prone to major technical implementation difficulties.

Please replace paragraph [0087] at page 18, beginning at line 11, with the following paragraph:

[0087] In these examples, the enriched water must have a minimal flow rate of 200 ml per minute but this flow rate can easily reach values of about 500 ml per minute or even higher values for the first embodiment, while this flow rate can easily reach values of about 1000 ml per minute, and more preferably 1500 ml per minute, or even higher values for the second embodiment. Such flow rates can be obtained, for example, through the use of a pump such as the Series 120 pump supplied by

Micropump Inc. (<http://www.micropump.com>). This gear pump equipped with a gear set N21 is capable of delivering 900 ml/min at a pressure of 5 to 6 bar. Another example of usable pumps is the pump corresponding to the model TS057G.APPT.G02.3230 of the Tuthill company (<http://pump.tuthill.com/>) and which is capable of delivering a flow rate of about 1100 ml/min at a differential pressure of 6 Bar.